

Environment, Safety and Health

Department of Energy
FY 1998 Budget Request to Congress
(discretionary dollars in thousands)

	FY 1996 Current Appropriation	FY 1996 Comparable Appropriation	FY 1997 Current Appropriation	FY 1997 Comparable Appropriation	FY 1998 Request
Environment, Safety and Health					
Office of environment, safety and health (non-def)	—	104,571	48,200	67,968	62,731
Environmental research and development	114,446	—	—	—	—
Nuclear safety policy	13,375	—	—	—	—
Program direction	—	51,081	37,300	48,006	46,185
Subtotal, Environment, Safety and Health	127,821	155,652	85,500	115,974	108,916
Use of prior year balances	-4,396	-4,396	-1,421	-1,421	—
Total, Environment, Safety and Health	123,425	151,256	84,079	114,553	108,916

**DEPARTMENT OF ENERGY
FY 1998 CONGRESSIONAL BUDGET REQUEST
ENVIRONMENT, SAFETY AND HEALTH**

EXECUTIVE BUDGET SUMMARY

Mission:

The Office of Environment, Safety and Health (EH) develops innovative, unique, and cost-effective approaches for the protection of Department of Energy (DOE) workers, the public, and the environment. This commitment is demonstrated by continuous improvement in program and policy development; independent oversight of the status of environment, safety, health, and safeguards and security programs; and sharing of technical resources, assistance, and information. EH seeks to ensure that DOE activities are conducted in a way that prevents accidents or injuries to workers and the public, and prevents harm to the environment. EH is the major cross-cutting source of expertise in disciplines such as environmental protection, nuclear safety engineering, public health, industrial hygiene, radiation protection, construction safety, risk management, epidemiology, and occupational medicine. The goal is to leverage scarce resources and skilled personnel to efficiently provide DOE's line management programs with the tools and independent program assessments required to preserve safety and to effectively protect national security interests at DOE sites. Open communication, participation, and performance feedback on EH activities are integral to EH's success.

The Environment, Safety and Health program is funded in two appropriations accounts: (1) Energy Supply Research and Development and (2) Other Defense Activities. The non-defense EH program consists of technical assistance, National Environmental Policy Act, health studies, management and administration, and a program direction decision unit for all EH employees. The defense EH program includes oversight, health studies, and the Radiation Effects Research Foundation (RERF).

The EH mission is urgent. Residual hazards at DOE facilities, especially in the nuclear weapons complex, result from many years of nuclear material production and processing and are still being characterized. Nevertheless, it is clear that due to more than 50 years of nuclear weapons production, DOE harbors the largest inventories of hazardous materials in the world outside of the former Soviet Union. Due in large part to the sudden end of the Cold War and the resultant rapid shutdown of the production and processing facilities, much of this material -- including plutonium, spent fuel, uranium and hazardous chemicals -- is stored in aging and deteriorating facilities, and in conditions that are in themselves hazardous. There is still a lack of reliable data for many of these facilities on the most basic safety issues, such as electrical and ventilation systems. While facing these challenges, the problem of secure storage of special nuclear material and classified information remains.

DOE is transitioning to new missions of weapons dismantlement, environmental cleanup, and facility decontamination and decommissioning. EH technical experts work with line program managers to develop tools needed to manage safety at DOE facilities more effectively and at less cost to taxpayers. EH has demonstrated that the Department can do its work better, more safely, and at less cost by integrating safety into the planning and execution of work. EH will continue to work with its partners in the field to ensure that safety is no longer viewed as an "add-on" that produces only paper and needless cost, but as an asset that allows efficient targeting of the most urgent risks, most efficient use of limited resources, and effective accomplishment of work.

The EH overall major goals and objectives include the following.

Goal 1: Provide a standardized corporate independent oversight process to appraise the effectiveness of environment, safety, health, and safeguards and security programs throughout DOE. To accomplish the goal of corporate independent oversight, the following objectives have been established: (a) identify, prioritize, and target Departmental needs for independent oversight; (b) incorporate the DOE's guiding management principles into all oversight activities; (c) institutionalize a coordinated and consistent independent oversight for the DOE; (d) administer an enforcement program that appropriately penalizes significant violations of nuclear safety requirements; and (e) disseminate lessons learned to reinforce good practices.

Goal 2: Provide quality (timely, efficient, and effective) corporate support and technical services. To accomplish this corporate support and technical services goal, the following objectives have been established: (a) identify and support Departmental environment, safety and health crosscutting programs and technical services that are aligned with critical missions and integral to mission accomplishment; (b) evaluate operational performance data and identify for corporate assessment and action those vulnerabilities that pose urgent risks to DOE workers, the public, and mission accomplishment; (c) further ongoing partnerships with private industry, government agencies, and national safety organizations, to promote information exchange and program benchmarking to enhance DOE safety programs; and (d) continuously improve corporate services through feedback and performance measures.

Goal 3: Provide Departmental requirements, guidance, and policy for environment, safety and health program implementation and measurement. To accomplish this goal, the following objectives have been developed: (a) support ongoing field analysis, interpretation, and application of "WorkSmart" standards (safety guidelines) through the Necessary and Sufficient process; (b) support field program execution by providing needed regulatory interpretations and implementation guidance; (c) interface with outside regulators analyzing comments on pending regulations pertinent to DOE and regulatory policies and actions having impact on DOE missions; (d) continue stewardship and improve effectiveness of the new environment, safety and health orders; and (e) develop, issue, and implement technical standards that apply to DOE work and that rely on appropriate consensus standards.

Goal 4: Provide a National Environmental Policy Act (NEPA) process that encourages managers to use the NEPA process, builds public trust, and minimizes cost and preparation/review time. To accomplish this NEPA goal, EH has established the following objectives: (a) implement NEPA contract reforms that provide incentives for quality and timely performance; (b) implement changes to improve the NEPA process; (c) implement additional reforms for high priority projects to deal with situations where schedule is of paramount importance; (d) implement enhancements for public involvement to encourage and facilitate public participation throughout the NEPA process; and (e) form a quality team to analyze the environmental impact statement process and recommend improvements.

Goal 5: Provide environment, safety, and health performance and management accountability. To accomplish this goal, EH has established the following objectives: (a) develop and support implementation of a DOE-wide environment, safety, and health budget and planning process that defines scope, identifies costs, prioritizes activities based on relative risk, and allocates resources based on established commitments in a visible manner for implementation of environment, safety, and health program activities; (b) improve environment, safety, and health performance

through the application of total quality approaches to environment, safety, and health management processes; and (c) integrate environment, safety, and health in all Departmental business functions.

Goal 6: Provide an integrated information management program. To accomplish this goal, EH's objectives are: (a) formalize the information management function; (b) provide quality environment, safety, and health information to the public, EH, DOE, and other stakeholders; (c) provide all stakeholders effective communication, sharing, and processing of quality information; and (d) continuously improve management of information.

Goal 7: Conduct EH's mission in an open, trustworthy, and responsive manner. To accomplish this goal, EH's objectives are: (a) establish and implement programs that strengthen the public's trust, confidence, and respect in and for EH; (b) establish and implement programs that strengthen EH's credibility with Departmental and contractor employees; and (c) support the Department's efforts to reduce the volume of national security information and to minimize future classification.

Goal 8: Promote the health and safety of DOE's workers and communities surrounding Department sites and support understanding of radiation effects and other hazards on humans. To accomplish this goal, EH's objectives are to increase the understanding of radiation, chemical, and other hazards to DOE workers and the public through (a) assisting the field in the identification and application of effective approaches to prevent injury and illness, and (b) supporting domestic and international health effects information on populations exposed to deliberate and accidental releases of varying levels of ionizing radiation.

The legal requirements that affect the activities of the EH organization include all environmental, safety, and health Federal regulations, as well as legislation such as the Atomic Energy Act of 1954, as amended, and the National Defense Authorization Act for Fiscal Year 1995.

Strategy:

EH's intent is to assure that quality, objectivity, responsiveness and innovation are hallmarks of all EH activities. EH focuses on developing management-level analytical products, reducing redundancies, and enhancing staff development. EH serves its principal customers in the following major areas: (a) development of Departmental environment, safety, and health requirements, guidance and interpretations that are effective and efficient to guide program implementation; (b) improve environment, safety and health performance and management accountability by supporting the integration of environment, safety, and health considerations into the Department's business and budget planning processes; (c) provision of critical corporate environment, safety and health support and services, including regulatory and industry interface, and technical assistance to improve program management and execution and to assist in the efficient and effective implementation of requirements, and (d) conduct of independent oversight activities that provide a comprehensive status of environment, safety, health, and safeguards and security performance at DOE facilities.

Major Changes:

Performing new types of hazardous work safely and securely at facilities that were designed to meet the requirements of outdated rules and orders is one of DOE's most critical projects. Many old, poorly-maintained buildings do not meet current building codes and safety standards. "WorkSmart" Standards provide a graded approach to developing safety standards that allows the Department to tailor the standards to the work and the facilities.

Pilot applications of this process indicate that worker safety can be enhanced while program costs are reduced. The Department plans to use this process to proceed with safe and timely stabilization of facilities at Rocky Flats and other locations throughout the DOE complex.

The EH independent oversight program has been extremely useful in helping the Department effectively identify and target unacceptable risk. Comprehensive environment, safety and health assessments provide DOE management with validated, professional appraisals of the site's performance, by identifying areas of greatest risk in terms of both immediate hazards and overall program management. The foundation of this approach is an assessment of management effectiveness based on an analytic framework or "template" that clearly articulates the principles and operational elements of sound management programs. The template allows assessments to be objective and to apply common criteria to all sites. These assessments supply DOE management with validated, professional appraisal of the site's performance. The foundation of the new approach (the guiding principles of safety management) is an analytic framework that permits objective program analysis based on the principles of sound safety management. Changes in the Department's ability to apply resources to areas of greatest need have already been observed, but will become more evident in increased efficiency in meeting environmental, safety, health, and safeguards and security issues during FY 1998.

The rapid transition of the Department to a business management model with its emphasis on gaining cost-efficiencies, privatization and innovative management structures in the field has brought concomitant changes in how EH functions. Special emphasis will be given to self-assessment and self-reporting by field elements as a source of performance information, coupled with increased emphasis of EH performance analysis. Likewise, increasing priority will be given to programs that help move DOE line management from outdated environment, safety and health management approaches and systems, as will programs that facilitate the exchange of innovative business or environment, safety and health management practices that are preventive and cost-efficient in nature. From a technical safety assistance perspective special emphasis will be given to urgent programmatic needs such as safely managing the decommissioning and decontamination of aging DOE facilities, and hazardous waste management.

EH will continue to build on its strong record of cutting costs without risking the safety and health of DOE workers, the quality of the environment, or the quality of the health studies program. Even as challenges have grown, the EH budget has been reduced by cutting administrative overhead costs and focusing on real needs. An EH staffing plan has identified the most critical functions and closely matched personnel to fit those needs. Functions of lower priority will continue to be eliminated. This will result in a cut in federal personnel from 415 in Fiscal Year 1997 to 391 in FY 1998. EH has also analyzed how it utilizes support contractors and set specific criteria for their limited use.

Major Issues:

The medical surveillance for former workers program, required by the 1993 Defense Authorization Act, could potentially cost hundreds of millions of dollars. The Office of Environment, Safety and Health has worked over the past three years to craft a cost-effective approach that relies on feasibility studies to target populations most at risk. Last year, EH awarded contracts to six consortia of universities, labor unions, and health specialists.

Health studies efforts include the investigation of the health effects on workers and the public reflecting activities from the local Department of Energy sites, as well as the evaluation of the world-wide effects of radiation exposures. The Office of Environment, Safety and Health is proposing to increase support for Chernobyl and the Russian Federation dosimetry, worker health and epidemiological studies to enhance our knowledge of radiation exposures. The studies focus on a unique and scientifically critical set of data from a former nuclear weapons plant in Russia, which can offer the

scientific community an unparalleled opportunity to gain insights into the health effects of ionizing radiation, and, consequently, the health and cleanup standards that follow.

Program Performance Measures

The Office of Environment, Safety and Health (EH) continues to shift from a reactive approach to an emphasis on prevention and excellence in protecting worker and public safety and health and in achieving environmental standards.

EH serves as the Departmental advocate for institutionalizing effective and integrated safety management which focus on the key tenets of work planning, hazard analysis and hazard control. Success will be measured by the implementation of enhanced work planning systems at DOE sites.

EH incorporates the existing risk based environment, safety, and health planning and budgeting process into all new major Management and Operating contracts and those that are scheduled for renewal. Success will be measured by inclusion of environment, safety, and health provisions in 6 additional Management and Operating contracts.

By completing vulnerability studies to identify environment, safety, and health vulnerabilities across the complex, serious vulnerabilities will be reduced. Success will be measured by the reduction of the number of unaddressed serious vulnerabilities at DOE facilities from several dozen to zero.

EH is institutionalizing a multi-disciplinary, fully integrated oversight process for environment, safety, health, and security evaluations. Success will be measured by the DOE community clearly understanding the safety management template and the expectations of the oversight activities.

EH is implementing appropriate standards for work in progress that will provide for the health and safety of workers, the public and the environment. Success will be measured by the completion of projects initiated in FY 1996 and FY 1997, with full implementation of this process into the Department's operations in FY 1998.

The field, contractors, and outside organizations continue to adopt EH standards. Success will be measured by a decrease in lost work days due to occupational illness or injury, decrease in the number of personnel contaminations with radionuclides, and a decreasing trend in the number of serious accidents where policy is a root cause of the problem.

Date: _____

Tara O'Toole, M.D., M.P.H.
Assistant Secretary
Environment, Safety and Health

**ENVIRONMENT, SAFETY and HEALTH
ORGANIZATION FUNDING PROFILE¹
(Dollars in Thousands)**

<u>Sub-Program</u>	<u>FY 1996 Current Appropriation</u>	<u>FY 1997 Original/Current Appropriation</u>	<u>FY 1998¹ Request</u>	<u>FY 1999 Request</u>
<u>EH Non-Defense</u>				
Operating Expenses				
Technical Assistance ²	\$ 0	\$ 25,350	\$ 23,500	
NEPA	0	3,500	3,000	
Health Studies	0	0	18,731	
Management and Administration	0	19,350	17,500	
Program Direction ²	<u>0</u>	<u>37,300</u>	<u>46,185</u>	
Subtotal	0	85,500	108,916	
Adjustment (use of prior year balances)	<u>0</u>	<u>(1,421)</u>	<u>0</u>	
Subtotal Non-Defense	\$ 0	\$ 84,079	\$ 108,916	
<u>EH Defense</u>				
Operating Expenses				
Oversight	\$ 0	\$ 14,526	\$ 14,015	\$ 13,775
Health Studies	0	38,568	25,485	27,725
RERF	0	15,000	14,500	14,500
Program Direction	<u>0</u>	<u>10,706</u>	<u>0</u>	<u>0</u>
Subtotal	0	78,800	54,000	58,325
Adjustment	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal Defense	\$ 0	\$ 78,800	\$ 54,000	\$ 54,000
TOTAL	<u>\$ 0</u>	<u>\$ 162,879</u>	<u>\$ 162,916</u>	

¹FY 1998 budget reflects transfer of some Health Studies activities and Program Direction from Other Defense Activities Appropriation (Defense) to the Energy Supply, Research and Development (Non-Defense).

<u>Sub-Program</u>	<u>FY 1996 Current Appropriation</u>	<u>FY 1997 Original/Current Appropriation</u>	<u>FY 1998 Request</u>	<u>FY 1999 Request</u>
<u>Appropriation/Program</u>				
Energy Supply, Research & Development				
Environment, Safety & Health Activities	\$ 6,915	\$ 0	\$ 0	\$ 0
Worker Health & Safety	28,650	0	0	0
Health Studies	29,332	0	0	0
Oversight	12,366	0	0	0
Planning & Administration	37,670	0	0	0
Nuclear Safety Policy	13,500	0	0	0
Other Defense Activities				
Security Evaluations	14,707	0	0	0
Nuclear Safety	17,679	0	0	0

<u>Sub-Program</u>	<u>FY 1996 Current Appropriation</u>	<u>FY 1997 Original/Current Appropriation</u>	<u>FY 1998 Request</u>	<u>FY 1999 Request</u>
Weapons Activities				
Dose Reconstruction	\$2,888	\$0	\$0	\$0
Marshall Islands	6,800	0	0	0
Representative to the DNFSB	<u>1,000</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	\$ 171,507	\$ 0	\$ 0	\$ 0
Adjustment (use of prior year balance)	(\$ 4,396)			
SBIR	(387)	0	0	
Rescission	<u>(225)</u>	<u>0</u>	<u>0</u>	
Subtotal	<u>\$ 166,499</u>	<u>\$ 0</u>	<u>\$ 0</u>	
Comparability Adjustments:				
Energy Supply, Research & Development				
Working Capital Fund	4,504			
Defense Environmental Restoration				
Dose Reconstruction	<u>17,250</u>			
Total ES&H	<u>\$ 188,253</u>	<u>\$ 162,879</u>	<u>\$ 162,916</u>	

1. Authorizations:
P.L. 83 - 703, "Atomic Energy Act of 1954"
P.L. 100-408, "Price Anderson Amendments Act of 1988"
P.L. 95-91, "Department of Energy Organization Act" (1977)

2. The certification packaging and transportation of nuclear materials program has been transferred to the Office of Environmental Management and in FY 1998 will be funded in the Defense Environmental Restoration account. In FY 1997, this program is funded at \$4,300,000 in Technical Assistance and \$400,000 in Program Direction.

**ENVIRONMENT, SAFETY and HEALTH
STAFFING PROFILE**

<u>Sub-Program</u>	<u>FY 1996 Current Appropriation</u>	<u>FY 1997 Original/Current Appropriation</u>	<u>FY 1998² Request</u>
<u>FTEs</u>			
Non-Defense	316	315	391
Defense	<u>95</u>	<u>100</u>	<u>0</u>
TOTAL	411	415	391

²In FY 1998, all EH Federal employees have been incorporated in the Energy Supply, Research and Development Appropriation (Non-Defense Program Direction).

**ENVIRONMENT, SAFETY, AND HEALTH
PROGRAM FUNDING BY SITE
(Dollars in thousands)**

<u>Laboratory/Plant/Installation</u>	<u>FY 1996³ Current Appropriation</u>	<u>FY 1997 Original/Current Appropriation</u>	<u>FY 1998 Request</u>
Sandia National Laboratories	\$282	\$235	\$270
Los Alamos National Laboratory	1,010	1,000	950
Brookhaven National Laboratory	3,622	2,930	2,935
Argonne National Laboratory	4,454	3,787	2,345
Idaho National Engineering Laboratory	6,036	5,000	4,920
Oak Ridge Institute for Science & Educ.	6,928	6,300	6,210
Oak Ridge National Laboratory	14,976	12,100	12,070
Pacific Northwest National Laboratories	17,793	15,577	15,515
Lawrence Berkeley Laboratory	1,364	1,100	1,110
Lawrence Livermore National Laboratory	8,513	7,038	7,165
Savannah River Technology Laboratory	173	140	140
Westinghouse Hanford	125	135	100
HQs	127,985	108,958	109,186
Adjustment	<u>(5,008)</u>	<u>(1,421)</u>	<u>0</u>
TOTAL	<u>\$188,253</u>	<u>\$162,879</u>	<u>\$162,916</u>

³Comparability numbers.

DEPARTMENT OF ENERGY

FY 1998 CONGRESSIONAL BUDGET REQUEST ENERGY SUPPLY, RESEARCH AND DEVELOPMENT (Tabular dollars in thousands, Narrative in whole dollars)

ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE

PROGRAM MISSION

The Office of Environment, Safety and Health (EH) is the Department of Energy's (DOE) corporate resource for technical support in the areas of nuclear safety, occupational safety and health, environmental compliance, and health studies. EH administers an integrated program to analyze facility operations, assist line management to implement major safety assurance or environmental compliance programs, and to develop policies and standards related to safety and health. EH maintains an expert staff in the disciplines of nuclear safety, radiation protection, environmental protection, industrial hygiene, industrial safety, public health, construction safety, and risk management. The staff applies its expertise to facilities and programs across the complex for each of DOE's major program functions. EH efforts have been concentrated into four business lines: Technical Assistance, National Environmental Policy Act (NEPA), Health Studies and Management and Administration. These activities comprise a wide range of corporate-based functions supporting key departmental missions to address emerging program vulnerabilities, significant or new nuclear and industrial hazards, and improved methods of managing or implementing programs. A substantial portion of these activities are directed at crosscutting Department of Energy (DOE)-wide environment, safety and health functions which are analogous to those performed by any corporate central office, e.g., supporting Departmental accreditation programs for radiation protection monitoring, administering DOE's Voluntary Protection Program for enhancing safety management, collecting and analyzing DOE-wide environment, safety and health performance data to identify adverse trends or issues, and to assess corporate vulnerabilities that, if left unmitigated, could lead to serious accidents or substantial fiscal liabilities. Given EH's close contacts with private industry, regulatory agencies, and national environment, safety and health organizations, activities are also directed at facilitating information and program exchanges between DOE line management and counterparts in the private sector to improve safety management. This internal DOE corporate function extends to assisting DOE-wide improvements in critical management responsibilities for planning work ("Enhanced Work Planning"), applying regulations ("HAZWOPER guidance"); and radiation protection program management. Beyond the traditional corporate services provided, these activities are directed at supporting line program efforts to prevent injuries and illnesses from occurring, and to avoid the major mission risks attendant to the often unprecedented hazards that must be managed effectively across DOE.

The activities performed by these business lines are as follows:

TECHNICAL ASSISTANCE: These activities comprise a range of corporate-based functions supporting key departmental missions to address emerging program vulnerabilities, significant or new nuclear and industrial hazards, and improved methods for managing or implementing safety programs. Also, support is provided to: crosscutting Department-wide functions which ensure the quality of environment, safety, and health monitoring; safety and health protection of Federal and contractor employees; programs for strengthening safety performance; and communication of environment, safety, and health program guidance and practices. Overall activities focus on the safety and health of workers and the public, protection of the environment and Federal facilities, and prevention and/or mitigation of effects of unforeseen occurrences. Activities also involve developing, interpreting, promulgating, and maintaining coherent and comprehensive requirements, guidance, and technical standards for protecting workers, the public, and the environment.

NATIONAL ENVIRONMENTAL POLICY ACT: This program provides a process that enhances managers' decisionmaking, builds public trust, and minimizes the cost and time for document preparation and review while maintaining quality.

HEALTH STUDIES: These activities include grants to states to study off-site health effects and a Memorandum of Understanding with the Department of Health and Human Services.

MANAGEMENT AND ADMINISTRATION: These activities provide for the centralized management and direction of EH for the Department-wide business and budget planning process; delineating as systems support or organization budgeting, financial control, and procurement; information management; and technical training and professional development.

The **GOALS** of EH **Non-Defense** programs are:

- To conduct corporate support and services that consistently provide quality, timely, efficient, and effective environment, safety, and health programs that meet priority needs and receive high customer satisfaction.
- To provide an effective system of policies, requirements, guidance, and technical standards that significantly increase the protection of the environment and enhance public and worker safety and health.
- To effectively implement the NEPA process and foster public trust.
- To establish and maintain a Department-wide business and budget planning process that identifies environment, safety, and health vulnerabilities and enables effective line program allocation of environment, safety, and health resources.
- To establish and maintain an integrated information management program that will enhance environment, safety, and health performance.
- To improve the performance and effectiveness of the Department's workforce and contractor employees in matters related to environment, safety, and health.

The **OBJECTIVES** related to these goals are:

- Provide specialized technical assistance to line management to address environment, safety and health issues; identify processes that lead to WorkSmart standards and improved performance; and provide an exchange of operating experience and lessons learned.
- Support programs to improve exposure assessment and medical monitoring of the DOE workforce.
- Identify policy, requirements, guidance, and standards in existing environment, safety, and health directives, and integrate directives' component parts into a new environment, safety, and health directive system, and into a standards-based safety management system.
- Review Safety Analysis Reports (SARs) risk analyses, and operational analyses.
- Develop environment, safety, and health contract reforms that provide incentives for quality and timely performance and encourage innovative contracting approaches.
- Ensure the completion of timely and adequate NEPA reviews.
- Ensure the consistency and quality of NEPA documents and increase the efficiency of NEPA personnel.

- Streamline the environmental review process.
- Support the implementation of a DOE-wide environment, safety, and health budget and planning process.
- Improve the information management function by enhancing the ability to provide quality environment, safety, and health information to the public, EH, DOE, and other stakeholders.
- Transition from a prescriptive compliance-based approach to a performance-oriented approach utilizing a standards-based, graded approach to enhance facility safety.
- Ensure that EH personnel receive necessary and comprehensive training to perform their assigned duties.
- Support studies to assess the health of populations living near DOE sites in order to determine if the health of the communities has been negatively impacted by DOE operations.
- Ensure that DOE concerns are considered in the development of environmental regulation.

PERFORMANCE MEASURES:

The performance measures related to environment, safety, and health activities are primarily qualitative rather than quantitative. Some performance measures are:

- Reduced worker health and safety impacts; no fatalities and fewer serious injuries; fewer instances of significant worker exposures; and lower overall total exposures to radiological and toxicological materials.
- Fewer radiological and toxicological contamination events, fewer abnormal operating events, and fewer procedural violations.
- Improved environment, safety and health performance trends (e.g., decreased lost workdays due to occupational illness, injury; decreased number of personnel contaminated with radionuclides; reduced non-compliance with external environmental requirements; and improved pollution prevention).
- Decreased number of serious accidents where policy is a root cause of the problem.
- Timely resolution of identified deficiencies and concerns associated with the operations of DOE occupational medical programs.

SIGNIFICANT ACCOMPLISHMENTS AND PROGRAM SHIFTS:

The Department has compiled an integrated Department-wide set of environment, safety and health performance measures and publishes a quarterly environment, safety and health performance indicator report to help ensure the safety and health of workers and the public and the protection and restoration of the environment.

Specific accomplishments and program shifts are defined within the respective business line descriptions that follow.

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
PROGRAM FUNDING PROFILE
(Dollars in thousands)**

<u>Sub-Programs</u>	<u>FY 1996⁴ Current Appropriation</u>	<u>FY 1997⁵ Original/Current Appropriation</u>	<u>FY 1998 Request</u>
Technical Assistance	\$ 0	\$ 25,350	\$ 23,500
NEPA	0	3,500	3,000
Health Studies	0	0	18,731
Management & Administration	<u>0</u>	<u>19,350</u>	<u>17,500</u>
Subtotal	\$ 0	\$ 48,200	\$ 62,731
Adjustment (use of prior year balances)	<u>0</u>	<u>(1,421)</u>	<u>0</u>
Total Non-Defense Programs	\$ 0	\$ 46,779	\$ 62,731
<u>Appropriation/Program</u>			
Energy Supply, Research & Development			
Environment, Safety & Health Activities	\$ 6,915		
Worker Health & Safety	28,650		
Health Studies	20,000		
Oversight	12,366		
Planning & Administration	2,859		
Nuclear Safety Policy	<u>13,500</u>		
Total	\$ 84,290		

⁴ Authorizations: P.L. 83-703, "Atomic Energy Act of 1954"
P.L. 95-91, "Department of Energy Organization Act" (1977)

⁵ Technical assistance includes funding in the amount of \$ 4,500,000 in FY 1996 and \$ 4,300,000 in FY 1997 for the certification , packaging and transportation of nuclear materials program which was transferred and funded by the Office of Environmental Management in FY 1998.

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
PROGRAM FUNDING BY SITE
(Dollars in thousands)**

	FY 1996⁶ Current <u>Appropriation</u>	FY 1997 Original/Current <u>Appropriation</u>	FY 1998 <u>Request</u>
Sandia National Laboratories	\$ 217	\$ 198	\$ 170
Los Alamos Laboratory	985	917	800
Brookhaven National Laboratory	3,522	3,278	2,860
Argonne National Laboratory	3,024	2,687	2,345
Idaho National Engineering Laboratory	5,876	5,469	4,770
Oak Ridge Institute for Science & Education	6,898	6,431	5,610
Oak Ridge National Laboratory	14,726	8,553	8,970
Pacific Northwest Laboratories	9,000	7,466	6,515
Lawrence Berkeley Laboratories	1,364	1,272	1,110
Lawrence Livermore Laboratory	7,218	6,611	5,765
Savannah River Technology Laboratory	173	161	140
HQs	<u>31,287</u>	<u>5,157</u>	<u>23,676</u>
Subtotal	84,290	48,200	62,731
Adjustment (use of prior year balances)	<u>0</u>	<u>(1,421)</u>	<u>0</u>
Total	<u>\$ 84,290</u>	<u>\$ 46,779</u>	<u>\$ 62,731</u>

⁶Comparable numbers.

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
TECHNICAL ASSISTANCE
(Dollars in thousands)**

Program Performance Summary:

I. Mission Supporting Goals and Objectives

Technical assistance within the Office of Environment, Safety and Health consists of the following:

Line Management Support focuses on improving safety, environmental protection, and health programs. These support efforts often involve the development of unique tools and approaches, because the mix of radioactive, hazardous, and toxic materials at DOE facilities is unique. Support efforts span the design, construction, operation, and decontamination and decommissioning of nuclear weapons production and research-related facilities; construction safety; work planning techniques to identify, evaluate, and eliminate hazards; and identification of technologies and innovative adaptations of existing practices. It also includes support to line management in developing WorkSmart Standards, safety and health requirements, and the continuation of departmental standards committee initiatives, and to help ensure effective regulation and the safe operation of nuclear facilities and hazardous activities, DOE develops and implements nuclear safety policy requirements and standards, including DOE Orders, rules, guidance documents, and technical standards. In the development of nuclear safety requirements and standards, the Department interacts with other industrial, governmental, and international groups. In cases where DOE has unique nuclear conditions or hazards, particularly those involved in weapons production, DOE develops and applies its own DOE Technical Standards. These activities involve operation of the technical standards program in compliance with the National Technology Transfer and Advancement Act of 1995. The Office of Environment, Safety and Health develops and issues environmental policy, when needed because of events or new requirements pertinent to new legislation, regulations, or Executive Orders, or to protect the public and the environment when a deficiency in programs or operations is identified. The program consists of mandatory corporate environmental reporting.

Environment, Safety and Health Guidance supports the development of interpretations and guidance documents for safety and health issues and the environmental requirements of the Clean Air Act, the Clean Water and Safe Drinking Water Acts, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Superfund Amendments and Reauthorization Act (SARA), Emergency Planning and Community Right to Know Act (EPCRA), and Radioactive Waste and Hazardous Substance Acts.

Interagency Representation monitors emerging environmental regulations that affect DOE operations and current laws (e.g., the Atomic Energy Act, the Clean Air Act, and the Pollution Prevention Act). This area also develops the corporate infrastructure necessary to support the movement to external regulation.

II. Funding Schedule

<u>Program Activity</u>	<u>FY 1996⁷</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>\$ Change</u>	<u>% Change</u>
Line Management Support ⁸	\$31,855	\$20,544	\$18,300	\$-2,244	-11%
Environment, Safety & Health Guidance	2,500	2,100	2,400	+300	+14%
Interagency Representation	<u>2,425</u>	<u>2,706</u>	<u>2,800</u>	<u>+94</u>	<u>+3%</u>
Total	\$36,780	\$25,350	\$23,500	\$-1,850	-7%

⁷Comparable numbers.

⁸Line Management Support includes funding in the amount of \$4,500,000 in FY 1996 and \$4,300,000 in FY 1997 for the certification, packaging and transportation of nuclear materials program which is funded by the Office of Environmental Management in FY 1998. Also includes funding for policy studies.

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
TECHNICAL ASSISTANCE
(Dollars in thousands)**

III. Performance Summary - Accomplishments

FY 1996 FY 1997 FY 1998

Line Management Support

- | | | | |
|---|---------|-------|-------|
| <ul style="list-style-type: none"> - Guidance for worker protection for hazardous waste and emergency response operations has been identified, developed and published for comment; final guidance will be published and distributed throughout the complex in FY 1997. | \$1,925 | -- | -- |
| <ul style="list-style-type: none"> - The remaining segment of worker protection for hazardous waste operation where new technologies are utilized is expected to be completed by FY 2000. Model programs are researched and developed as the technologies themselves are developed and field tested before being introduced into routine operations. The model programs for each segment of hazardous waste operations--including those associated with technology development--focus on minimizing risk as they relate to identified vulnerabilities and on improving safety of nuclear waste storage and disposal. | -- | 743 | 900 |
| <ul style="list-style-type: none"> - An Integrated Safety and Health Management Framework (ISHMF) for decontamination and decommissioning (D&D) activities has been defined and the major components of a D&D safety program have been outlined. A model program for D&D activities has been field tested at the Hanford Site, and guidance has been structured into the ISHMF. The ISHMF includes both nuclear and nonnuclear facilities, workers, and materials. Where possible, individual processes and procedures are developed and field tested; where major computational and decisionmaking components, or segments, of the model program are required, work has begun. For example, where hazards analyses require computation of risk for different quantities or types of radioactive or hazardous waste, interactive electronic tools are developed and tested; likewise, interactive electronic tools are developed to assist line managers to develop specific D&D strategies. | 1,970 | -- | -- |
| <ul style="list-style-type: none"> - A Technical Standard applicable to DOE D&D work has been developed; field testing is expected to be completed in FY 1997. Because of the extensive scope of the D&D activities within the Department, D&D safety will be required to adapt as the situation changes. | -- | 1,100 | 1,100 |

FY 1996 **FY 1997** **FY 1998**

III. Performance Summary - Accomplishments (continued)

- Assist D&D line managers in minimizing health and safety risks from old, degraded and contaminated facilities by: developing site or facility-specific integrated safety and health strategies at Hanford, Mound, Savannah River and other sites; resolving nuclear safety issues associated with applicable safety and health requirements for D&D; and incorporating lessons learned and good practices from D&D experience in industry.	\$300	\$100	\$200
- A construction safety curriculum has been completed for the DOE construction project managers and demolition safety programs. Materials are provided from a lending library located at Idaho National Engineering Laboratory (INEL). The Technical Manual for Hoisting and Rigging was loaded and is being maintained in current status on the Internet in FY 1996. Beginning in FY 1997, plans include evaluating the feasibility of maintaining the Technical Manuals for other safety disciplines on the Internet. Those disciplines that are being examined include: fire safety, firearms safety, pressure vessel safety, explosives safety, electrical safety, and chemical handling and storage. On-site technical resource assistance is provide for special cases as requested by line management.	350	300	300
- Completed analyses of workers' compensation costs to target prevention and abatement strategies. Complete development of Return-to-Work program to facilitate the reduction of workers' compensation costs.	50	0	--
- Issue new performance-based "Worker Protection Management for DOE Federal and Contractor Employees" Order (DOE 0440.1), covering crosswalks, implementation guides, and technical standards. Completed activities for defining Departmental radiological control programs for all DOE nuclear facilities for the protection of workers against radiation exposure as required by law (10 CFR 835). Provide over 700 formal responses to questions concerning radiation protection and occupational safety and health policy and technical standards posed by DOE field elements and their contractors to the DOE OSH Interpretations Response Line. Published the 1996 Edition of the DOE Fire Protection Handbook.	1,600	1,400	1,200

III. Performance Summary - Accomplishments (continued)

	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>
- Develop WorkSmart Standard Safety Guidelines; eliminate unnecessary, burdensome and costly standards; and assist line officials in the appropriate application of the Necessary and Sufficient Process as related to work planning, hazard analysis and control, and developing authorization bases for all field activities with nuclear safety implications. Respond to approximately 1,000 calls from DOE line and operating contractor management, technical staff and workers on a wide variety of problematic safety and health issues.	\$500	\$100	\$350
- In coordination with line organizations, conduct environment, safety and health vulnerability assessments of spent nuclear fuel, plutonium and highly enriched uranium materials. Assist program and field offices in the development and implementation of hundreds of remediation actions to minimize the risks associated with handling and storing these materials. Perform follow-up reviews to ensure that the vulnerabilities are properly dispositioned and corrective actions are implemented. Issue status reports which describe progress and major accomplishments in reducing risk to workers, the public and the environment.	700	250	500
- Provide assistance for aviation operations on request to line management and implemented a cost-effective safety management system. Issued new performance-based order requirements and developed guidance for the use of DOE owned and chartered aircraft. Provide flight safety evaluations and assistance for Headquarters personnel who are using charter and fleet aircraft.	400	350	350
- Field test chemical storage and handling model program and guidance for hazards evaluation and accident/exposure prevention. Complete field pilot programs that use best practices of the chemical industry; began transferring experience to other DOE operational units. Conduct field pilot tests of the use of chemical industry best practices. Provide assistance to correct DOE-wide chemical safety vulnerabilities including chlorine reductions, improved chemical inventory systems and improved practices in use, handling, and storage of toxic chemicals.	1,365	400	400
- Provide technical assistance to respond to emerging or unforeseen health and safety issues, program needs, and requests deemed to be of a priority nature; these needs are largely customer-driven or issue-driven and are, therefore, critical. Support technical and policy issue resolution, where issues arise of a specialized nature beyond staff capabilities or available resources or timeframe. Support customer-base functions such as the ES&H Council, technical meetings, and stakeholder "partnerships" that aim to improve communications, coordination and assistance to the line.	850	--	--

III. Performance Summary - Accomplishments (continued)

	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>
- The DOE Laboratory Accreditation Program (DOELAP) provides corporate accreditation services for radiation dosimeters and biomedical assay (analysis of blood, fecal, and urine samples) programs to validate data on worker exposures. Accreditation is required by 10 CFR 835 for DOE sites and facilities, which issue more than 1.5 million dosimeters each year. Accuracy and traceability of DOE dosimeter accreditation programs for worker radiation exposures through DOELAP has withstood legal challenges and saved the DOE millions of dollars.	\$2,420	\$2,400	\$2,400
- The DOE-Voluntary Protection Program (DOE-VPP) "STAR" status is awarded to those sites or facilities who meet the rigorous tests for excellence in existing safety and health programs. STAR status has been awarded to two DOE sites, and a major evaluation of the Savannah River site will be completed in FY 1997. An additional ten applications are under various stages of review in the application process; an additional five joint-private-sector VPP evaluations with Occupational Safety and Health Administration (OSHA) have been completed.	450	500	500
- Develop, implement, and improve site-specific safety and health programs for DOE Federal employees occupational safety and health (FEOSH) program activities. Field a model ergonomics program at a DOE, field site or office and provide required ergonomics infrastructure. Issue guidance, assistance and intervention strategies with regard to violence in the workplace relative to FEOSH activities. Provide technical assistance for 13,000 Federal DOE employees for occupational safety and health protection per Federal statute. Developed implementation plans for ergonomics initiative that focuses on DOE Federal employees.	350	200	200
- Develop an Enhanced Work Planning process which effectively improves worker productivity and safety. Assist eight DOE facilities, at the request of the field office, in the implementation of Enhanced Work Demonstration pilot projects. At one site, effort applied to only several projects resulted in a cost avoidance of over \$7 million; another recorded a 21 percent reduction in accidents. Assistance has been requested from additional field offices, with some being repeat "customers."	2,465	1,650	1,850
- Support one-time process to define, describe, and document recordkeeping and reporting requirements for worker health and safety; include the culling of extraneous information.	300	--	--
- Evaluate new nuclear materials technologies for application to improve the safety of tritium handling, plutonium packaging and storage, and spent nuclear fuel stabilization, processing, and interim storage.	200	150	150

III. Performance Summary - Accomplishments (continued)

	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>
- Conducted DOE certification reviews for packaging and transporting nuclear and hazardous materials, including WIPP acceptance criteria; provided on-site technical assistance. This activity was transferred to EM for management in FY 1997 and is budgeted for EM in FY 1998.	\$4,500	\$4,300	\$0
- Participate in safety analysis and risk assessment reviews of nuclear facilities. Evaluate the authorization basis for facility design, construction, operation, D&D, and Environmental Impact Statements. Improve and standardize methodologies with regard to the effects of facility and equipment aging, treatment of HEPA filters, radiological and toxic chemical exposure, natural phenomena hazards, and process safety management. Identify and resolve significant nuclear safety issues generic to the entire DOE complex.	750	400	650
- In response to requests from program and field offices, provide specialized nuclear safety engineering assistance in the areas of seismic, criticality, HVAC, fire protection, and chemical safety in the resolution of complex safety issues raised by the DNFSB, external stakeholders, and line management (including those issues associated with the startup of WIPP, Hanford spent nuclear fuel facilities, and packaging and storage operations at Savannah River, Hanford and other sites).	1,100	1,125	1,450
- Develop expert technical positions for multiple committees and workgroups on environmental and radiological regulatory issues and on Environmental Impact Statements in the areas of analyses of hazards, consequences and risks to workers, the public and the environment.	50	50	50
- Perform the Department's regulatory function of ensuring that the 23 dams owned by DOE meet Federal guidelines and assess technical and diverse safety documents concerning the risks associated with NASA launching nuclear powered devices into space; prepare an annual safety report to the President.	510	300	370
- Improve nuclear safety and reduce losses through the dissemination of lessons learned summaries of events and accidents that occur within the DOE complex. Provide safety notices on more generic or recurring safety problems. Collect and analyze ES&H performance measurement data and publish a quarterly Performance Indicator Report on the progress being made toward improving worker safety and health and the environment within the DOE community. Develop and maintain an occurrence reporting system similar to NRC and analyze data for the development of lessons learned to prevent recurrence of accidents.	2,950	2,311	2,755
- Assist program and field offices to improve radiological control operations to protect workers against radiation exposures as required by law (10 CRF 835).	600	300	300

	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>
III. Performance Summary - Accomplishments (continued)			
- Provide environmental policy advice and interpretations on DOE's rule on radiation standards to protect the public and the environment.	\$75	\$50	\$100
- Maintain up-to-date DOE-wide policy for radiation protection of the public and the environment and general environmental protection. Completed projects associated with improved treatment of high use radiation accident victims and provided expert consultation and assistance for radiation accident patient management.	865	75	75
- Issue nuclear safety management rules in 10 CFR Part 830 and related guidance; develop integrated safety management guidance; interface with Defense Nuclear Facilities Safety Board, Nuclear Regulatory Commission and other national and international standards-setting organizations on nuclear safety matters; manage the DOE Technical Standards Program; develop and maintain a DOE facility design reference handbook; and provide technical interpretations of nuclear safety requirements.	2,735	1,845	1,845
- Produced ES&H newsletters. Managed annual ES&H conference and occupational safety and health and radiation exposure databases and published annual report. (These activities are funded under the Management and Administration business line in FY 1997 and FY 1998)	1,200	--	--
- Provide radiation and environmental regulatory and subject area technical assistance.	50	35	30
- Review environmental documents prepared by line management to verify adequacy of the subject. Ensure information in documents improves (more readable, more accurate, more on target), and external acceptance of documents improves.	<u>275</u>	<u>110</u>	<u>275</u>
Total Line Management Support	\$31,855	\$20,544	\$18,300

ES&H Guidance

- Provide environmental guidance documents and workshops (e.g., guides, information briefs, handbooks) to assist programs in understanding and implementing environmental requirements in the following areas: Clean Air Act, Water Acts, Waste Cleanup Acts, Radioactive Waste Acts, Hazardous Substance Acts, Pollution Prevention Act, and cultural resource management.	1,900	1,500	2,000
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III. Performance Summary - Accomplishments (continued)

	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>
- Issue rule 10 CFR 834, Radiation Protection of the Public and the Environment. Review and update policies in Environmental Protection Order.	200	100	50
- Define criteria for establishing an acceptable standards program for operating facilities; assist line organizations in the implementation of these criteria; and move the Department towards standards-based planning and work.	<u>400</u>	<u>500</u>	<u>350</u>
Total ES&H Guidance	\$2,500	\$2,100	\$2,400

Interagency Representation

- Develop and represent DOE's position on emerging environmental and radiation regulations to ensure DOE's concerns are considered.	1,000	743	1,000
- Coordinate the fulfillment of commitments made by the Secretary in the Implementation Plan to Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 91-6, act as the management sponsor and point of contact for the "Radiation Protection Qualification Criteria" as related to the Departmental Response to Recommendation 93-3; Coordinate other DNFSB-related activities, such as responding to information requests, reviewing Departmental correspondence related to DNFSB activities, and preparing responses to DNFSB correspondence.	550	400	400

III. Performance Summary - Accomplishments (continued)

	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>
- Develop and implement a corporate infrastructure to support movement to external regulation, as necessary. Define DOE corporate safety and health program requirements. Continue to interface with external regulators. Participate in Occupational Safety and Health Administration (OSHA) rulemaking activities. Continue support of the transition of privatized operations to external oversight. Provide support to the field for safety and health program reviews. Continue memorandum of understanding between DOE and Department of Labor to provide technical assistance in developing a systematic approach to the orderly transition to external regulation. Developed work plan for OSHA oversight pilot program at Argonne National Laboratory. Worked with OSHA to initiate study by National Academy of Public Administration on resource issues pertaining to transition to OSHA oversight. Prepare response for the implementation of the recommendations of the National Academy of Public Administration study concerning the transition of DOE to OSHA oversight. Follow-up on lessons learned from Argonne pilot program. Continue to support the orderly transfer of jurisdiction of DOE privatized facilities. Provide interface with OSHA and the States to resolve any outstanding jurisdictional issues. Negotiate transfer of jurisdiction to OSHA of privatized DOE facilities.	\$550	\$1,300	\$1,400
- Identify, review and resolve issues concerning external regulation of worker health and safety that include jurisdictional issues between external regulators and DOE, an orderly transition to external enforcement, coverage of privatized facilities, deregulation of facilities, and major changes to internal safety management and oversight functions.	<u>325</u>	<u>263</u>	<u>0</u>
Total Interagency Representation	<u>\$2,425</u>	<u>\$2,706</u>	<u>\$2,800</u>
Total Technical Assistance	<u>\$36,780</u>	<u>\$25,350</u>	<u>\$23,500</u>

Explanation of Funding Changes FY 1997 to FY 1998

The overall funding reduction for Technical Assistance of \$1,850,000 is the result of the following program adjustments:

- Develop model programs for worker protection for hazardous waste operations. (+\$157,000)
- Incorporate lessons learned and good practices from D&D experience in industry. (+\$100,000)
- Complete activities for defining Departmental radiological control programs. (-\$200,000)
- Incorporate process to respond to approximately 1,000 inquiries on a wide variety of problematic safety and health issues. (+\$250,000)
- Develop an Enhanced Work Planning process. (+\$200,000)
- Perform follow-up reviews to ensure that environment, safety and health vulnerabilities are properly dispositioned and corrective actions are implemented. (+\$250,000)
- Transfer of packaging and certification program to Office of Environmental Management. (-\$4,300,000)
- Identify and resolve nuclear safety issues generic to the entire DOE complex. (+\$250,000)
- Increase emphasis on specialized nuclear safety engineering assistance to operations offices, program office teams, readiness review teams, and line managers in addressing complex safety issues raised by the DNFSB, external stakeholders, and line management. (+\$325,000)
- Perform safety analysis reviews in preparation for the Pluto Fast Flight space mission. (+\$70,000)
- Develop and maintain an occurrence reporting system similar to NRC. (+\$444,000)
- Streamline providing radiation and environmental regulatory advice and technical assistance and increase emphasis on verification of data in environmental documents. (+\$210,000)

- Increase assistance to programs in understanding and implementing environmental requirements. (+\$500,000)
- Issued rule 10 CFR 834, Radiation Protection of the Public and the Environment. (-\$50,000)

Explanation of Funding Changes FY 1997 to FY 1998 (continued)

- Streamline guidance for a standards based planning and work program. (-\$150,000)
- Increase emphasis on activities to ensure DOE's position is considered on emerging environmental and radiation regulations. (+\$257,000)
- Continue support of movement to external regulation. (+\$100,000)
- Complete identifying, reviewing, and resolving issues concerning external regulation. (-\$263,000)

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
NATIONAL ENVIRONMENTAL POLICY ACT
(Dollars in thousands)**

Program Performance Summary:

I. Mission Supporting Goals and Objectives

The NEPA program supports the implementation of the Department's proposed activities by assuring compliance with the National Environmental Policy Act and related environmental review requirements. The goal of the NEPA program is to foster sound departmental planning and decision-making and to build public trust through effective process implementation. NEPA program objectives include: (a) ensuring the timely and adequate completion of NEPA reviews through technical assistance, independent review, and approval recommendations for major programmatic environmental impact sitewide and other EISs, and related NEPA documents; (b) ensuring the consistency and quality of NEPA documents and increasing the efficiency of NEPA personnel by determining and responding to customer needs; (c) issuing guidance on selected technical and policy topics; (d) conducting workshops for Headquarters and field NEPA personnel; and (e) participating in NEPA process improvement teams and other initiatives that foster continuing improvement of the NEPA process. Another objective is to streamline the environmental review process by issuing revised regulations and DOE Orders to reduce costs and regulatory burdens so that the process works better, costs less, and is more useful to decision makers and the public.

II. Funding Schedule

<u>Program Activity</u>	<u>FY 1996⁹</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>\$ Change</u>	<u>% Change</u>
NEPA	\$3,410	\$3,500	\$3,000	\$-500	-14%

⁹Comparable number.

III. Performance Summary - Accomplishments

	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>
<u>NEPA</u>			
- Save more than \$26 million over 5 years of the Department's NEPA compliance costs by issuing and implementing phase II of NEPA Contract Reform Guidance. Provide technical assistance in the preparation of major programmatic environmental impact statements, site-wide and other environmental impact statements, and related documents.	\$2,410	\$2,500	\$2,000
- Issue revised NEPA regulations and continue the regulatory development process to reduce costs and regulatory burdens so that the NEPA process works better, costs less, and is more useful to decision makers and the public.	<u>1,000</u>	<u>1,000</u>	<u>1,000</u>
Total NEPA	<u>\$3,410</u>	<u>\$3,500</u>	<u>\$3,000</u>

Explanation of Funding Changes FY 1997 to FY 1998

- A decline in need for technical assistance to support programmatic environmental impact statements, several are expected to be completed in 1997. (-\$500,000 million)

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
HEALTH STUDIES
(Dollars in thousands)**

I. Mission Supporting Goals and Objectives:

The Health Studies program promotes the health and safety of DOE's workers and communities surrounding Department sites. Information from those health studies is communicated to the DOE workforce, line management and community stakeholders. Many of these studies are conducted in partnership with state health departments under DOE's State Health Agreement program or with the Centers for Disease Control and Prevention under a Memorandum of Understanding with the Department of Health and Human Services.

In 1990, the Secretaries of the Department of Energy (DOE) and the Department of Health and Human Services (HHS) signed a Memorandum of Understanding (MOU) through which HHS conducts an external independent program of epidemiologic health analysis. The analysis conducted under this MOU focuses on an examination of health effects that may have resulted from past or current DOE operations, including activities such as the development and production of nuclear weapons and materials, environmental management, and other nuclear energy-related research and development activities. This analysis undertakes a strategic planning process which capitalizes on the strengths of the two agencies and ensures the efficient use of limited resources.

The State Health Agreement (SHA) Program was initiated in 1989 to fund State health departments efforts to determine the impact of past DOE operations on the health of surrounding communities. Activities supported under the SHA program include: the determination of offsite chemical and radiologic exposure (historical dose reconstruction); establishment of cancer and birth defects registries; community health studies; and community health education activities as they relate to radiation and chemical exposure. Within HHS, the Centers for Disease Control and Prevention and the National Institute for Occupational Safety and Health conduct studies of the DOE workforce while the Center for Environmental Health conducts studies of communities that host DOE operations. The Memorandum of Understanding with HHS was renewed in 1996 for an additional 5 years.

II. Funding Schedule

<u>Program Activity</u>	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>\$Change</u>	<u>%Change</u>
HHS MOU	\$ 0	\$ 0	\$14,731	\$14,731	100%
State Health Agreements	<u>0</u>	<u>0</u>	<u>4,000</u>	<u>4,000</u>	<u>100%</u>
Total Health Studies Program	\$ 0	\$ 0	\$18,731	\$18,731	100%

These activities were funded in the Other Defense Activities Appropriation for FY 1996 and FY 1997. The HHS MOU was \$15,124,000 in FY 1996 and \$14,768,000 in FY 1997, while the State Health agreements in FY 1996 were \$5,769,000 and in FY 1997 were \$5,000,000.

III. Performance Summary - Accomplishments:

FY 1996 FY 1997 FY 1998

Health Studies

- Continue collaboration in epidemiologic studies conducted under the Memorandum of Understanding with the Department of Health and Human Services. In FY 1996 and FY 1997, these activities were funded in the Other Defense Activities appropriation. Under this program, 20 worker health studies were completed and 27 additional studies were initiated. Major environmental dose reconstruction projects at Hanford and Fernald have also been completed and a new dose reconstruction project has been initiated at Savannah River. The program supports multiple community outreach and educational efforts and has initiated a project with eight Indian nations near Hanford to develop their own culturally based environmental dose reconstruction strategies.
- Complete support commitments under State Health Agreements whereby the Department provides grants to states hosting DOE facilities to determine the impact of operations of those facilities on the health of the surrounding communities. In FY 1996 and FY 1997, these activities were funded in the Other Defense Activities appropriation. Awards were made to the States of California, Colorado, Florida, Idaho, New Mexico, South Carolina, and Tennessee. Projects have been completed in Florida, Idaho, New Mexico, and California (within the next few months). This program will conclude when projects in South Carolina, Colorado, and Tennessee are completed at the end of FY 1998.

\$ 0 \$ 0 \$ 14,731

0 0 4,000

Total Health Studies Program

\$ 0 \$ 0 \$ 18,731

Explanation of Funding Changes FY 1997 to FY 1998

- Apparent increases reflect changes within the Department's distribution of funds. The programmatic funding actually has decreased with the nearing of completion of the state health agreements.

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
MANAGEMENT AND ADMINISTRATION
(Dollars in thousands)**

PROGRAM PERFORMANCE SUMMARY:

I. Mission Supporting Goals and Objectives

The goal of Management Planning is to establish clear environmental, safety and health priorities and to manage all activities in proactive ways that effectively and significantly increase protection to the environment and to public and worker safety and health. This goal is intrinsic to and permeates all Departmental missions of assuring nuclear deterrence, conducting research, energy security, dismantling surplus facilities, and cleaning up legacy waste. In support of these missions, Management Planning provides the DOE corporate leadership and management tools and processes to enhance the quality and cost-effectiveness of environment, safety, and health program performance of DOE line organizations. This includes providing: consistent identification of needed Departmental environment, safety, and health activities; risk-based priority setting; effective budget decision making and allocation of environment, safety, and health resources; and improved accountability for environment, safety and health performance. To achieve this goal, it is imperative that the Department's business processes for defining mission objectives, assuring that work objectives are compatible with mission objectives, establishing and modifying contracts, obtaining and allocating resources, managing execution, and monitoring performance consider all aspects of safety management.

The goal of Contract Reform is to institutionalize safety management accountability mechanisms for all DOE operating contractors and to improve performance of operating organizations in managing significant environment, safety, and health risks in a cost-effective manner. Contract Reform works with all DOE line programs, both Headquarters and the field. Objectives include: (1) contractor accountability for environment, safety and health performance, including establishment of performance commitments; (2) establishment of safety management systems, and (3) establishment of specific contractual performance measures, based on the site and mission, that are tied directly to contractor rewards for performance.

The Information Management program maximizes the sharing and efficient use of environment, safety, and health data and information throughout the DOE complex. The program seeks to identify and facilitate access to data and information vital to the successful conduct of the EH programs and activities by maintaining and integrating resources to support the reporting, tracking, trending, analysis, and dissemination of environment, safety, and health data. The goal of this activity is to provide and maintain an integrated environment, safety and health information management program, thereby providing effective and efficient access to critical environment, safety and

health data on such aspects as safety occurrences, environmental and health impacts, radiation exposure, performance indicators, epidemiology, and environment, safety and health management.

The Technical Training and Professional Development program assures that EH staff are properly trained to perform their duties related to environment, safety, and health matters in accordance with current DOE policy, procedures, and professional standards. This is accomplished through the development and maintenance of an environment, safety, and health training infrastructure; EH staff development programs in the areas of professional, technical, and information management proficiency; fellowships and grants to further industrial hygiene and health physics disciplines; specialized environment, safety, and health training as required for DOE and contractor employees; and development of safety and health technical qualification standards for DOE-wide use.

II. Funding Schedule

<u>Program Activity</u>	<u>FY 1996¹⁰</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>\$ Change</u>	<u>% Change</u>
Management Planning	\$ 3,000	\$ 3,000	\$ 3,000	\$0	0%
Contract Reform	2,000	1,336	800	-536	-40%
Information Management	12,100	10,014	9,300	-714	-7%
Technical Training & Professional Development	<u>7,000</u>	<u>5,000</u>	<u>4,400</u>	<u>-600</u>	<u>-12%</u>
Subtotal	\$ 24,100	\$ 19,350	\$ 17,500	\$ -1,850	-10%
Adjustment (use of prior year balances)	<u>0</u>	<u>(1,421)</u>	<u>0</u>		
Total	<u>\$ 24,100</u>	<u>\$ 17,929</u>	<u>\$ 17,500</u>		

¹⁰ Comparable numbers.

III. Performance Summary - Accomplishments

Management Planning

	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>
- Institutionalized and integrated environment, safety and health risk-based planning and budgeting into line program risk-management activities.	\$1,500	--	--
- Utilized a risk-based prioritization approach to review line program environment, safety and health budgets and ensured that all risk-significant environment, safety and health issues were adequately addressed in the Department's budget.	1,500	--	--
- Support the extension of the ES&H management planning process from planning and budgeting to include program execution.	--	3,000	--
- Provide a model at two pilot sites for line managers' environment, safety and health performance which demonstrates success in accomplishing environment, safety and health cost accounting for program activity execution.	_____	_____	<u>3,000</u>
Total Management Planning	\$3,000	\$3,000	\$3,000

Contract Reform

- Institutionalized environment, safety and health contract language into DOE Acquisition Regulation (DEAR) clauses; ensured that the language was incorporated into 20 new operating contracts; developed new ES&H selection criteria for Request for Proposals (RFP's) issued during the year, and improved the ES&H component of the Scopes of Work for each site and major facility.	2,000	--	--
- Ensure good environment, safety and health performance objectives and measures are developed and incorporated into new contracts and monitor contractor self-measurement of the effectiveness of their safety management systems.	_____	<u>1,336</u>	<u>800</u>
Total Contract Reform	\$2,000	\$1,336	\$800

III. Performance Summary - Accomplishments (continued)

FY 1996 **FY 1997** **FY 1998**

Information Management

- Continue the management of environment, safety and health data and information by (1) ensuring the identification, publication and quality of critical environment, safety and health data, (2) integrating information technologies to support ES&H reporting, tracking, and trending systems, (3) maintaining information management systems and infrastructure to support the Department's Occurrence Reporting and Processing System, Radiation Exposure Monitoring System, Computerized Accident/Incident Reporting System, Performance Indicator Data System, Non-Compliance Tracking System, and other databases critical to the management of ES&H throughout the complex.	\$6,000	\$4,933	\$4,807
- Apply Web-based technologies available through EH's Technical Information Services to make environment, safety and health data and information more rapidly and reliably available to the environment, safety and health community by providing electronic access to environment, safety and health publications and databases that support the Department's NEPA, Oversight, Lessons-Learned, Fire Protection, Worker Health & Protection, Chemical Safety, International Health Studies, Enforcement and Voluntary Protection programs.	<u>6,100</u>	<u>5,081</u>	<u>4,493</u>
Total Information Management	\$12,100	\$10,014	\$9,300

Technical Training and Professional Development

- Continue to develop training capabilities that improve the technical competency and skills mix of EH staff to more effectively implement the overall EH mission and programs.	400	400	400
- Support grants, fellowships, and training programs at colleges and universities to ensure the education and development of the future DOE technical workforce.	3,400	3,400	3,400
- Specialized environment, safety, and health training for DOE workforce.	<u>3,200</u>	<u>1,200</u>	<u>600</u>
Total Technical Training and Professional Development	<u>\$7,000</u>	<u>\$5,000</u>	<u>\$4,400</u>
Subtotal Management and Administration	<u>\$24,100</u>	<u>\$19,350</u>	<u>\$17,500</u>
Adjustment (use of prior year balances)	<u>0</u>	<u>(1,421)</u>	<u>0</u>
Total Management and Administration	<u>\$24,100</u>	<u>\$17,929</u>	<u>\$17,500</u>

Explanation of Funding Changes FY 1997 to FY 1998

- Reduce software development for specialized programs. (-\$714,000)
- Continue to reduce support for specialized environment, safety and health training for DOE workforce. (-\$600,000)
- Reduce level of effort for environment, safety and health contract reform activities. (-\$536,000)

**DEPARTMENT OF ENERGY
FY 1998 CONGRESSIONAL BUDGET REQUEST
ENERGY, SUPPLY, RESEARCH AND DEVELOPMENT**

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
PROGRAM DIRECTION
(Dollars in thousands)**

I. Mission Supporting Goals and Objectives

Program Direction provides overall direction and administrative support for Environment, Safety and Health programs to ensure that all operations are conducted in the most efficient and effective manner consistent with EH policies and programs. For FY 1998, all Program Direction funds for EH employees are provided in this appropriation.

Program Direction has been grouped into four categories:

Salaries and Benefits provides funding for a Federal staff with the technical expertise required to perform the essential EH mission. The EH mission requires experts to develop overall environment, safety and health policy guidance for DOE site and facility operations; to provide a central, cost effective corporate source of technical expertise and assistance to all field elements; to provide a central clearing house for information, analysis and feedback regarding new efforts, present activities, and unforeseen occurrences taking place at the multitude of diverse facilities within the DOE complex; to conduct independent oversight; to perform health studies; and perform activities relative to environment, safety and health programs across the DOE complex.

Travel funding provides staff the ability to perform the EH mission.

Support Services are not provided in FY 1997 and FY 1998 in this decision unit.

Other Related Expenses provides for the Working Capital Fund. The *Working Capital Fund* provides for non-discretionary prorated costs for items such as space utilization, computer and telephone usage, mail service, and supplies.

A structure change in FY 1998 provides for all Office of Environment, Safety and Health employees to be funded from the non-defense appropriation account.

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
PROGRAM DIRECTION
(Dollars in thousands)**

II. Funding Table:

	FY 1996 Current <u>Appropriation</u>	FY 1997 Original/Current <u>Appropriation</u>	FY 1998 <u>Request</u>
<u>Headquarters</u>			
Salaries and Benefits	\$32,836	\$31,004	\$38,371
Travel	1,750	1,500	2,350
Support Services	225	0	0
Other Related Expenses (Working Capital Fund)	<u>4,504</u>	<u>4,796</u>	<u>5,464</u>
Subtotal	\$ 39,315	\$ 37,300	\$ 46,185
Adjustment (use of prior year balances)	<u>(4,396)</u>	<u>0</u>	<u>0</u>
Total	<u>\$34,919</u>	<u>\$37,300</u>	<u>\$46,185</u>
Full Time Equivalents ¹¹	316	315	391

¹¹Additional EH Full time equivalents were also in the Other Defense Activities EH Program Direction decision unit (95 FTEs in FY 1996 and 100 FTEs in FY 1997.)

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
PROGRAM DIRECTION
(Dollars in thousands)**

III. Performance Summary:

FY 1996 Measurable Performance Activities:

- Reduced and streamlined contractor utilization.
- Implemented technical qualifications program.
- Continued emphasis on accident prevention and enhancing workers and public safety and health and in achieving environmental standards.

FY 1997 Measurable Performance Activities:

- Continued to reduce and streamline contractor utilization.
- Continue technical qualifications program.
- Support the protection of worker health and safety.

FY 1998 Measurable Performance Activities:

- Continue to reduce and streamline contractor utilization.
- Support the protection of worker health and safety.
- Maintain workload consistent with FY 1997 level with a reduction in the Federal workforce.
- Continue reduction in contractor utilization consistent with strategic alignment initiative.
- Continue to provide the Secretary and DOE managers with an important tool -- independent and unbiased view of how

well they are doing in managing environment, safety and health, and safeguards and security.

FY 1998 Measurable Performance Activities (continued)

- Continue technical qualifications program.

Explanation of Funding Changes FY 1997 to FY 1998:

- Changes reflect that all EH employees are funded from the one appropriation decision unit.
- The movement of program direction consolidation from the Other Defense Activities Appropriation reflects the addition of +\$8,217,000 with net decrease reflecting salary and benefits increases for requested FTEs, streamlining of travel, and elimination of contractor support.
- Working Capital Fund increases by 14% per the Department's projected determination of FY 1998 costs. (+\$668,000).